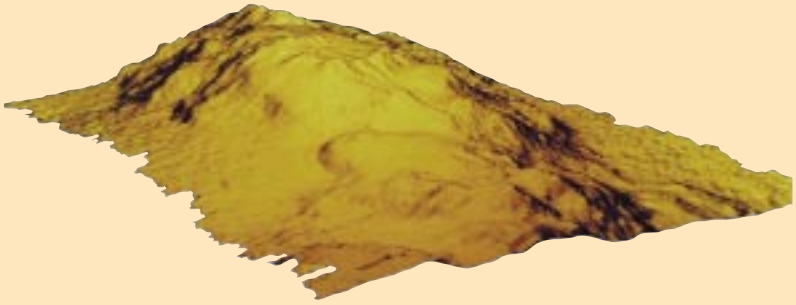
SPAWAR
Systems Center
San Diego

Geo-Acoustic Echo Processor (GEP)

The Geo-Acoustic Echo Processor (GEP) developed by SSC San Diego is designed to provide enhanced real-time sonar data processing. The GEP serves as an on-line or off-line system to process data for more accurate bathymetry maps and ocean-bottom characterization.



GEP FEATURES

- Uses fast processors capable of handling large time windows of data
- Employs diagnostic functions and displays
- Reprocesses raw data off-line
- Saves raw and processed data to 8-mm tape
- Processes up to 1001 sonar bottom points/ping with bathymetry and backscatter solutions
- Computes coarse bottom characterization in real time
- Calibrated against core samples

Rack-mountable VME Chassis containing

- PowerPC computer with built-in SCSI and LAN capabilities
- Serial and GPIB I/O cards
- DSP card with eight C40 processors
- Dual SCSI tape drive for data recording
- Keyboard and display for the maintenance computer
- IRIG-B card for timing

OPTIONAL

- Pentium maintenance and display computer

For additional information, contact:

Marine Navigation Division, D32
SSC San Diego
D32@ spawar.navy.mil

SD 150
June 1999
SSC San Diego
San Diego, CA 92152–5001
Approved for public release; distribution is unlimited.